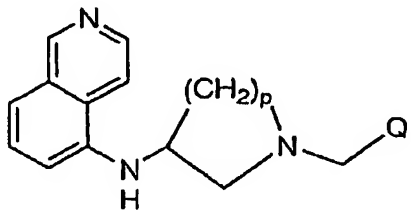
CLAIMS

1. A compound represented by formula (I) or a pharmaceutically acceptable salt or solvate thereof:



(I)

wherein Q represents a cyclic group selected from phenyl, pyridyl, pyrrolyl, thienyl, and furyl; one or two hydrogen atoms on the cyclic group are optionally substituted by a substituent selected from the group consisting of a halogen atom, C_{1-4} alkyl, nitro, and amino; and p is 2 or 3.

2. The compound according to claim 1, wherein Q represents a cyclic group selected from phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, 4-fluorophenyl, 2,6-difluorophenyl, 2,6-dichlorophenyl, 4-methylphenyl, 4-isopropylphenyl, 2-nitrophenyl, 3-nitrophenyl, 4-nitrophenyl, 4-chloro-2-nitrophenyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-aminophenyl, 3-aminophenyl, 4-aminophenyl, 2-amino-4-chlorophenyl, 1H-2-pyrrolyl, 1H-3-pyrrolyl, 2-thienyl, 3-thienyl, 2-furyl, and 3-furyl.

3. The compound according to claim 1 or 2, wherein p is 2.

4. The compound according to claim 1 or 2, wherein p is 3.

5. The compound according to claim 1, wherein Q represents 3-nitrophenyl or 3-aminophenyl and p is 2.

6. The compound according to claim 1, which is selected from the group consisting of:

(1) N5-[1-(2-chlorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(2) N5-[1-(3-chlorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(3) N5-[1-(4-chlorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(4) N5-[1-(4-fluorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(5)N5-[1-(2,6-difluorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;

(6)N5-[1-(2,6-dichlorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(7)N-(5-isoquinolyl)-N-[1-(4-methylbenzyl)tetrahydro-1H-3-pyrrolyl]amine;
(8)N5-[1-(4-isopropylbenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(9) N-(5-isoquinolyl)-N-[1-(2-nitrobenzyl)tetrahydro-1H-3-pyrrolyl]amine;
(10) N-(5-isoquinolyl)-N-[1-(3-nitrobenzyl)tetrahydro-1H-3-pyrrolyl]amine;
(11) N-(5-isoquinolyl)-N-[1-(4-nitrobenzyl)tetrahydro-1H-3-pyrrolyl]amine;
(12)N5-[1-(4-chloro-2-nitrobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(13)N-(5-isoquinolyl)-N-[1-(2-pyridylmethyl)tetrahydro-1H-3-pyrrolyl]amine;
(14)N-(5-isoquinolyl)-N-[1-(3-pyridylmethyl)tetrahydro-1H-3-pyrrolyl]amine;
(15)N-(5-isoquinolyl)-N-[1-(4-pyridylmethyl)tetrahydro-1H-3-pyrrolyl]amine;
(16) N5-[1-(2-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(17) N5-[1-(3-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(18) N5-[1-(4-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(19)N5-[1-(2-amino-4-chlorobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolylamine;
(20) N5-[1-(2-chlorobenzyl)-3-piperidyl]-5-isoquinolylamine;
(21) N5-[1-(3-chlorobenzyl)-3-piperidyl]-5-isoquinolylamine;
(22) N5-[1-(4-chlorobenzyl)-3-piperidyl]-5-isoquinolylamine;
(23) N-(1-benzyl-3-piperidyl)-5-isoquinolylamine;
(24) N5-[1-(2,6-difluorobenzyl)-3-piperidyl]-5-isoquinolylamine;
(25) N5-[1-(2,6-dichlorobenzyl)-3-piperidyl]-5-isoquinolylamine;
(26) N-(5-isoquinolinyl)-N-[1-(4-methylbenzyl)-3-piperidyl]amine;
(27) N-(5-isoquinolinyl)-N-[1-(4-isopropylbenzyl)-3-piperidyl]amine;
(28) N-(5-isoquinolinyl)-N-[1-(2-nitrobenzyl)-3-piperidyl]amine;
(29) N-(5-isoquinolinyl)-N-[1-(3-nitrobenzyl)-3-piperidyl]amine;
(30) N-(5-isoquinolinyl)-N-[1-(4-nitrobenzyl)-3-piperidyl]amine;
(31) N5-[1-(4-chloro-2-nitrobenzyl)-3-piperidyl]-5-isoquinolylamine;
(32) N-(5-isoquinolinyl)-N-[1-(2-pyridylmethyl)-3-piperidyl]amine;
(33) N-(5-isoquinolinyl)-N-[1-(3-pyridylmethyl)-3-piperidyl]amine;
(34) N-(5-isoquinolinyl)-N-[1-(4-pyridylmethyl)-3-piperidyl]amine;
(35) N5-[1-(2-aminobenzyl)-3-piperidyl]-5-isoquinolylamine;

(36) N5-[1-(3-aminobenzyl)-3-piperidyl]-5-isoquinolylamine;
(37) N5-[1-(4-aminobenzyl)-3-piperidyl]-5-isoquinolylamine;
(38) N5-[1-(2-amino-4-chlorobenzyl)-3-piperidyl]-5-isoquinolylamine;
(39) N-(5-isoquinolinyl)-N-[1-(1H-2-pyrrolylmethyl)-3-piperidyl]amine;
(40) N-(5-isoquinolinyl)-N-[1-(1H-3-pyrrolylmethyl)-3-piperidyl]amine;
(41) N-(5-isoquinolinyl)-N-[1-(2-thienylmethyl)-3-piperidyl]amine;
(42) N-(5-isoquinolinyl)-N-[1-(3-thienylmethyl)-3-piperidyl]amine;
(43) N-[1-(2-furylmethyl)-3-piperidyl]-N-(5-isoquinolyl)amine;
(44) N-[1-(3-furylmethyl)-3-piperidyl]-N-(5-isoquinolyl)amine;
(45)(3S)-N5-[1-(3-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolineamine; and
(46)(3R)-N5-[1-(3-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolineamine.

7. The compound according to claim 1, which is selected from (3S)-N5-[1-(3-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolineamine and (3R)-N5-[1-(3-aminobenzyl)tetrahydro-1H-3-pyrrolyl]-5-isoquinolineamine and a mixture thereof.

8. A pharmaceutical composition comprising a compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt or solvate thereof.

9. The pharmaceutical composition according to claim 8, for the treatment of a disease mediated by Rho kinase.

10. The pharmaceutical composition according to claim 9, wherein the disease mediated by Rho kinase is selected from the group consisting of hypertension, asthma including bronchial asthma, angina pectoris, cerebrovascular contraction, peripheral circulatory disorder, threatened premature birth, glaucoma, constriction of visual field, pollakiuria, cancer, invasion/metastasis of cancer, arteriosclerosis, retinopathy, immune response, inflammation, autoimmune diseases, cerebral dysfunction, osteoporosis, microbism, chronic renal failure, chronic nephritis, diabetic nephropathy, IgA nephropathia, thrombosis-related diseases, rheumatism, impotence, and fibrosis.

11. Use of a compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt or solvate thereof, for the manufacture of a medicament in the treatment of diseases mediated by Rho kinase.

12. The use according to claim 11, wherein the disease mediated by Rho kinase is selected from the group consisting of hypertension, asthma including bronchial asthma, angina pectoris, cerebrovascular contraction, peripheral circulatory disorder, threatened premature birth, glaucoma, constriction of visual field, pollakiuria, cancer, invasion/metastasis of cancer, arteriosclerosis, retinopathy, immune response, inflammation, autoimmune diseases, cerebral dysfunction, osteoporosis, microbism, chronic renal failure, chronic nephritis, diabetic nephropathy, IgA nephropathia, thrombosis-related diseases, rheumatism, impotence, and fibrosis.

13. A method for treating a disease mediated by Rho kinase, comprising the step of administering a therapeutically effective amount of a compound according to any one of claims 1 to 7 or a pharmaceutically acceptable salt or solvate thereof together with a pharmaceutically acceptable carrier, to a mammal.

14. The method according to claim 13, wherein the disease mediated by Rho kinase is selected from the group consisting of hypertension, asthma including bronchial asthma, angina pectoris, cerebrovascular contraction, peripheral circulatory disorder, threatened premature birth, glaucoma, constriction of visual field, pollakiuria, cancer, invasion/metastasis of cancer, arteriosclerosis, retinopathy, immune response, inflammation, autoimmune diseases, cerebral dysfunction, osteoporosis, microbism, chronic renal failure, chronic nephritis, diabetic nephropathy, IgA nephropathia, thrombosis-related diseases, rheumatism, impotence, and fibrosis.